

Mowing & Vegetation Management



INDOT maintains more than 60,000 acres of medians and roadsides along Indiana's roadways and strives to balance safety, costs, environmental protection, and aesthetics when maintaining roadside vegetation. INDOT's vegetation management focuses on improving safety along highways by maintaining vegetation at a safe height for driver visibility. Vegetation management practices also preserve natural wildlife habitat and plants, control or remove non-native and noxious plants, and improve the overall look of roadside rights-of-way.

Vegetation Management Explained

INDOT's mowing and vegetation management practices include herbicide treatments, right-of-way mowing, vegetation management, and seeding with wildflower and native plants and grasses.

It costs Indiana taxpayers approximately \$8 million each year to mow the 60,000-plus acres along interstates, U.S. highways and state routes. Herbicide application costs approximately \$32 per acre. Successful vegetation management reduces the need for mowing and herbicide application, which benefits the environment and saves money. Use of native plants and grasses helps battle invasive and noxious plants.

INDOT employs a three-pronged approach to vegetation management:

- Targeted Timing of Mowing Cycles
- Selective Herbicide Application
- Vegetation Management Zones

Mowing Cycles

INDOT crews closely monitor the growth of grass and vegetation and schedule mowing cycles based on geographic location and weather. Correctly timed mowing cycles slow the regrowth of grass and vegetation and reduce the need for additional mowing.

A cool-season grass, like the kind covering most rights-of-way, will put all of its energy toward rapid growth and generate seed heads in the late spring/early summer. Once the grass establishes its seed head, its growth slows drastically for the remainder of the year. However, if the seed head is not allowed to develop, the grass will continue to grow rapidly after each mowing, which can render mowing ineffective in a matter of days.

INDOT schedules mowing cycles in order to maximize the effectiveness of each cycle and to minimize the number of cycles needed. Except in areas where mowing is performed to address driver sight distance and safety issues, the first mowing cycle takes place after seed heads develop – which is approximately mid-May in the southern part of the state and early June in the north. While this does result in tall grass in the late spring/early summer, it also requires only two mowing cycles. The alternative to allowing tall grass to develop would require additional mowing cycles at approximately \$4 million per cycle.

Selective Herbicide

Every other year, INDOT applies a selective herbicide to the first 30 feet of right-of-way beyond the pavement. This herbicide application combats invasive species and other noxious weeds, as well as woody vegetation and other undesirable species. In addition, this herbicide treatment adds effectiveness to the mowing cycles by allowing for a uniform look and limited weed growth after mowing. Areas beyond 30 feet are spot treated on an as-needed basis. The timing of the herbicide treatment is applied such that crops, and desirable native vegetation and pollinators, are not negatively impacted.



Mowed too early (fully regrown only 10 days after mowing)



Correctly timed mowing (limited growth 60 days after mowing)

Vegetation Management Zones



The pictures above depict two sides of the same ramp. The shoulder on the left was not treated with herbicide, while the shoulder on the right was treated with herbicide. Both shoulders were mowed at the same time, but because the treated side is weed free, the mowing is more effective and longer lasting. This treatment is typically good for at least two years.

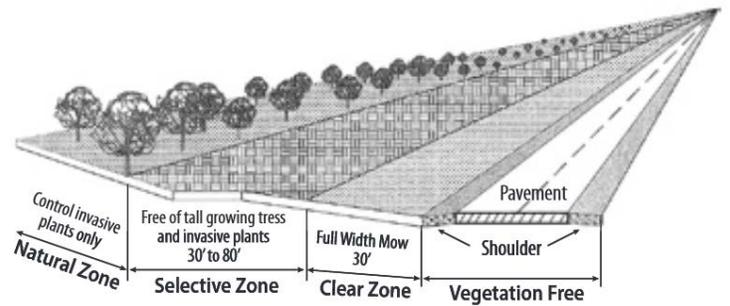
INDOT has divided its rights-of-way into different zones for vegetation management. In doing this, the appropriate maintenance can be performed while controlling costs and environmental impact. The primary mowing and vegetation management zones are:

Clear Zone: This area includes highway medians and extends from the edge of the roadway's shoulder pavement to 30 feet out. This area is mowed twice a year and receives selective herbicide treatment every two years to target invasive and noxious plants. In urban areas, this zone may be mowed more frequently.

Selective Zone: In areas where right-of-way extends from 30 to 80 feet from the edge of pavement, INDOT allows native plants more room to grow to create a natural appearance and provide pollinator habitat. INDOT uses spot mowing and herbicide to control invasive and noxious plants, as well as woody vegetation in these areas.

Natural Zone: Where right-of-way extends more than 80 feet from the road, INDOT allows native plants and vegetation to grow and serve as a defense against invasive species, which includes trees and other woody vegetation. This area shields the roadway from neighboring properties, promotes native plants, and connects fragmented wildlife habitat.

Other Zones: Areas adjacent to INDOT bridges and environmentally sensitive areas receive special treatment.



By limiting mowing to only the clear zone areas, native vegetation and wildflowers can thrive, providing food source and habitat for bees, butterflies, and other pollinators.

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